Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-8. (Canceled)

9. (Currently Amended) A method for validating that a sensor array detection ability mimics a human nose detection ability, the method comprising:

(a) contacting said sensor array with a constant fraction of a known vapor pressure of a first odorant to produce a first response intensity;

(b) contacting said sensor array with a constant fraction of a known vapor pressure of a second odorant to produce a second response intensity;

(c) comparing said first response intensity to said second response intensity; and

(d) adjusting said first and second response intensities to match the relative responses of a human ~~determining whether said response intensities are similar, thereby validating that said sensor array response detection ability mimics said human nose detection ability~~.

10. (Original) A method in accordance with claim 9, wherein said sensor array comprises at least two sorption-based sensors which are members selected from the group consisting of a chemiresistors, a conducting/nonconducting regions sensor, a SAW sensor, a metal oxide gas sensor, a bulk conducting polymer sensor, a Langmuir-Blodgett film sensor, and combinations thereof.

11. (Original) A method in accordance with claim 10, wherein said sensor is a conducting/nonconducting regions sensor.

12. (Original) A method in accordance with claim 10, wherein said sensor is a bulk conducting polymer sensor.

13. (Original) A method in accordance with claim 11, wherein said nonconducting region is an organic polymer.

14. (Original) A method in accordance with claim 13, wherein said organic polymer is a member selected from the group consisting of (poly(4-vinyl phenol), poly(α-methyl styrene), poly(vinyl acetate), poly(sulfone), poly(caprolactone), poly(ethylene-co-vinyl acetate),

poly(ethylene oxide), poly(ethylene), poly(butadiene), poly(vinylidine fluoride), poly(n-butyl methacrylate), poly(epichlorohydrin) and poly(ethylene glycol)).

15.　(Original)　A method in accordance with claim 9, wherein said odorant is a member selected from the group consisting of alkanes, alkenes, alkynes, dienes, alicyclic hydrocarbons, arenas, alcohols, ethers, ketones, aldehydes, carbonyls, carbanions, heterocycles, polynuclear aromatics, organic derivatives, biomolecules, microorganisms, bacteria, viruses, sugars, nucleic acids, isoprenes, isoprenoids, fatty acids and their derivatives.

16.　(Canceled)

17.　(Currently Amended)　A method for validating that a sensor array detection ability mimics a human nose detection ability, the method comprising:

(a)　contacting said sensor array with a first odorant with a first vapor pressure to produce a first response intensity;

(b)　contacting said sensor array with a second odorant with a vapor pressure lower than said first vapor pressure to produce a second response intensity;

(c)　comparing said first response intensity to said second response intensity; and

(d)　adjusting said first and second response intensities so that ~~determining whether~~ said second response intensity is greater than said first response intensity, thereby validating that a sensor array detection ability mimics a human nose detection ability.

18.　(Previously Presented)　The method of claim 9, wherein said constant fraction is 10%.

19.　(Currently Amended)　A method for validating that a sensor array detection ability mimics a human nose detection ability, the method comprising:

(a)　contacting said sensor array with a 10% fraction of a known vapor pressure of a first odorant to produce a first response intensity;

(b)　contacting said sensor array with a 10% fraction of a known vapor pressure of a second odorant to produce a second response intensity;

(c)　comparing said first response intensity to said second response intensity; and

(d)　adjusting said first and second response intensities to be ~~determining whether said response intensities are~~ similar, thereby validating that said sensor array response detection ability mimics said human nose detection ability.

20.   (Previously Presented) A method in accordance with claim 19, wherein said sensor array comprises at least two sorption-based sensors which are members selected from the group consisting of a chemiresistors, a conducting/nonconducting regions sensor, a SAW sensor, a metal oxide gas sensor, a bulk conducting polymer sensor, a Langmuir-Blodgett film sensor, and combinations thereof.